Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: Operations & Project Management **Semester: II**
Program: MBA GLOBAL_II **Time: 03 hrs.**
Course code: LSCM7023 **Max. Marks: 100**

Instructions: Allow simple calculator in the exam.

SECTION A
10Qx2M=20Marks

1. Instruction: Select the correct answer(s)/Answer in 1 line.

S. No.	Question	Marks	CO
Q1	Which of the following is not a direct measure of productivity? 1. Input 2. Output/Labour 3. Output/Capital 4. Output/Materials	2	CO1
Q2	Which of the following statements is true about value analysis/value engineering (VA/VE)? 1. The purpose of VA/VE is to simplify products and processes. 2. The objective of VA/VE is to achieve equivalent or better performance at a lower cost. 3. VA is performed before the production stage, while VE deals with products already in production. 4. both 1 and 2 5. 1, 2, and 3	2	CO1
Q3	_____ means doing the right things to create the most benefit for the company. 1. Efficiency 2. Effectiveness 3. Value 4. Productivity 5. None of the above	2	CO1
Q4	Which is the least important performance dimension for product development projects? 1. Time-to-market 2. Productivity 3. Quality 4. Product flexibility	2	CO1
Q5	Capacity flexibility can be achieved through: 1. Flexible plants 2. Flexible processes	2	CO1

	3. Flexible workers 4. Strategies that use the capacity of other organizations 5. All the above		
Q6	A horizontal bar chart that shows project tasks against a calendar is called. 1. milestone 2. goal 3. Gantt chart 4. PERT chart	2	CO1
Q7	The statistical tool that depicts a project's tasks and the relationships between those tasks is known as: 1. milestone 2. goal 3. Gantt chart 4. PERT chart	2	CO1
Q8	The scope of the work is defined in which phase of the project management? 1. Initiating 2. Planning 3. Executing 4. Closing	2	CO1
Q9	How the project work will be carried out, monitored, and controlled? These questions are answered in which phase of the project management? 1. Initiating 2. Planning 3. Executing 4. Closing	2	CO1
Q10	Which of the following is not project management goal? 1. Keeping overall costs within budget 2. Delivering the software to the customer at the agreed time 3. Maintaining a happy and well-functioning development team 4. Avoiding customer complaints	2	CO1
SECTION B **4Qx5M= 20 Marks** 1. Instruction: Write short / brief notes (max. half page each)			
Q11	As a model, briefly describe the source-make-deliver-return relationships (along with a diagram) in the following system: 1. A Hospital OR 2. An Automobile (Two-Wheeler) Manufacturer	5	CO3
Q12	A parcel delivery company delivered 108,000 packages last year, when its average employment was 80 drivers. This year the firm	5	CO3

	handled 122,000 deliveries with 96 drivers. What was the percentage change in productivity over the two years?		
Q13	A Company manufactures badminton racquets that it is able to sell at INR 150 per piece. The variable cost of the racquet is INR 100 per unit. If the company has made a total investment in foxed costs to the tune of INR 300, 000. What is the breakeven sale of the badminton racquets? Graphically depict the break-even point.	5	CO2
Q14	A toy manufacturing unit receives toys from local carpenter and performs operations on it before stocking It for sale. In the first step, the set of four toys are arranged in the pallet. The steps in the process are follows: Step 1: Preparation (set of four toys in a pallet): 8 minutes. Step 2: Pre-treatment: 12 minutes Step 3: Painting: 20 minutes Step 4: Drying: 10 minutes. Step 5: Inspection and packing: 5 minutes Draw a process flow-diagram an identify the bottleneck for this process.	5	CO3
SECTION C **3Qx10M=30 Marks** 1. Instruction: Based on the Case Study answer (Q15, Q16, Q17) with brief explanation (max 1 page each)			

Case Study:

Roots Corporation Limited operates a group of hotels under the brand name Ginger Hotels. At a glance, a Ginger Hotel offers all the facilities that a normal hotel would offer. These include check-in facilities; rooms with TV, fridge, and tea/coffee maker; room services such as laundry; restaurants; digital safes; wi-fi connection; meeting rooms, a business Centre, gymnasium, car rental service, doctor on call and currency exchange. However, similarity ends at this level.

A Ginger hotel distinguishes itself in several ways in the manner these services are offered. Unlike other hotels, Ginger hotels offer a limited à la carte menu in the restaurant at a nominal price. In case a guest does not like what is being offered it is possible to call up nearby restaurants, place an order, and collect the food from the Give n' Take counter in the hotel. The rooms are compact and well maintained and are available at a price that is much lower than the price charged by other hotels for a similar service.

"Please help yourselves" is a line that can be seen on most of the brochures and booklets in a Ginger hotel, and it aptly reflects its most distinguishing feature. It is not uncommon for guests to use the self-service check-in kiosk, identify their room, and carry their luggage to the room. As soon as a guest enters a Ginger hotel, he/she will come across several operations with a self-service facility. Some elements of self-service are described here:

> Self-Service Check-in: Upon arrival, guests can check-in to the hotel without any assistance from the reception counter. This is possible because Ginger hotels have self-check-in kiosks.
> Give n' Take Counter: Ginger hotels have a "Give n' Take" counter that the guest can use to deliver used clothes for laundry in the morning and to collect washed clothes after 7:30 pm the same day.
> Smart Get Set: There is an ironing room on every floor in Ginger hotels. Guests can use the room for pressing their clothes. Further, there are water dispensers on each floor, from which guests can fill their bottles.
> Smart Knick Knacks: Ginger has installed vending machines for hot and cold beverages and packed snacks. These vending machines can be accessed round the clock, irrespective of whether the restaurant is working or not.
> Smart Mart: There are vending machines that supply other things such as toiletries, combs, toothpaste, hygiene products, and mosquito repellents.

The company summarizes "the Ginger experience" as one providing intelligent, well-thought-out facilities and services at great value and with no frills attached.

Q15	How will you describe the overall strategy of Ginger Hotels in the Hotel Industry?	10	CO4
Q16	In their operations strategy consistent with the overall strategy? What are the operational elements of Ginger Hotels that provide this strategic dimension to the operations?	10	CO4
Q17	Can you identify the strategic and operational benefits that Ginger Hotels is likely to derive from the operations strategy and operation system design that it has chosen?	10	CO4
SECTION D **2Qx15M= 30 Marks** 1. Instruction: Answer with explanation (max. 2 page each)			
Q18	The following activities (Table 1) are part of a Project RRR to be scheduled using CPM: Table 1: Project Activities ACTIVITY / IMMEDIATE PREDECESSOR / TIME (WEEKS) A — 6 B A 3 C A 7 D C 2 E B, D 4 F D 3 G E, F 7 1. Draw the Activity on Node (AON) Network Diagram, and identify the critical path? 2. How many weeks will it take to complete the project? 3. How much slack does activity B have?	15	CO2

Q19	Kindly explain the DMAIC cycle of the six-sigma methodology for a typical manufacturing unit. NOTE: For explanation you may choose a product example of your choice.	15	CO3